

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. - 5. (canceled)

6. (currently amended) An image processing method for performing color process on an input image based on a color appearance model, said method comprising the steps of:

inputting a manual instruction of a user, which relates to conditions for respectively adjusting (1) balance, and (2) absolute intensity, of a chromatic adaptability;

inputting a manual instruction of the user, which relates to viewing conditions of respectively an image input side and an image output side;

setting a parameter of the chromatic adaptability from the inputted balance and absolute intensity;

performing a forward conversion of the color appearance model to convert color data of the input image into color data independent of any viewing condition by using the viewing condition of the image input side and the set parameter; and

performing an inverse conversion of the color appearance model to convert the color data obtained in the forward conversion into color data dependent [[of]] on the viewing condition of the image output side by using the viewing condition of the image output side and the set parameter.

7. - 13. (canceled).

14. (currently amended) A computer program product storing a computer readable medium comprising computer program codes, for an image processing method performing a color process on an input image based on a color appearance model, said product comprising process procedure codes for:

inputting a manual instruction of a user, which relates to conditions for respectively adjusting (1) balance, and (2) absolute intensity, of a chromatic adaptability;

inputting a manual instruction of the user, which relates to viewing conditions of respectively an image input side and an image output side;

setting a parameter of the chromatic adaptability from the balance condition and absolute intensity;

performing a forward conversion of the color appearance model to convert color data of the input image into color data independent of any viewing condition by using the viewing condition of the image input side and the set parameter; and

performing an inverse conversion of the color appearance model to convert the color data obtained in the forward conversion into color data dependent [[of]] on the viewing condition of the image output side by using the viewing condition of the image output side and the set parameter.

15. (canceled)

16. (previously presented) The method according to claim 6, wherein the balance of the chromatic adaptability is used to control weights of chromatic adaptabilities of respectively the image input side and the image output side.

17. (previously presented) The method according to claim 6, wherein the viewing condition includes a luminance value, the kind of illuminant and ambient light.

18. (previously presented) The method according to claim 6, wherein the viewing condition includes the kind of the viewing subject such as a monitor or a print.

19. (previously presented) The method according to Claim 6, wherein the absolute intensity is used to adjust an absolute chromatic adaptability while maintaining the balance of the chromatic adaptability.

20. (previously presented) The method according to Claim 6, wherein if the balance is set to a median value and the absolute intensity is set to a maximum value, the chromatic adaptability of the forward the inverse conversion are complete adaptation.

21. (currently amended) An image processing apparatus method for performing color process on an input image based on a color appearance model, comprising:

means for inputting a manual instruction of a user, which relates to conditions for respectively adjusting (1) balance, and (2) absolute intensity, of a chromatic adaptability and for inputting a manual instruction of the user, which relates to viewing conditions of respectively an image input side and an image output side;

means for setting a parameter of the chromatic adaptability from the inputted balance and absolute intensity;

means for performing a forward conversion of the color appearance model to convert color data of the input image into color data independent of any viewing condition by using the viewing condition of the image input side and the set parameter; and

means for performing an inverse conversion of the color appearance model to convert the color data obtained in the forward conversion into color data dependent [[of]] on the viewing condition of the image output side by using the viewing condition of the image output side and the set parameter.

22. (currently amended) An image processing method of performing color process on an input image based on a color apparatus model, said method comprising the steps of:

inputting a manual instruction of a user, which relates to a condition for respectively adjusting balance of a chromatic adaptability;

inputting a manual instruction of the user, which relates to viewing conditions of respectively an image input side and an image output side;

setting a parameter of the chromatic adaptability from the inputted balance;

performing a forward conversion of the color appearance model to convert color data of the input image into color data independent of any viewing condition by using the viewing condition of the image input side and the set parameter; and

performing an inverse conversion of the color appearance model to convert the color data obtained in the forward conversion into color data dependent [[of]] on the viewing condition of the image output side by using the viewing condition of the image output side and the set parameter.

23. (currently amended) An image processing apparatus for performing color process on an input image based on a color apparatus model, said apparatus comprising:

a first inputting section, arranged to input a manual instruction of a user, which relates to a condition for respectively adjusting balance of a chromatic adaptability;

a second inputting section, arranged to input a manual instruction of the user, which relates to viewing conditions of respectively an image input side and an image output side;

a setter, arranged to set a parameter of the chromatic adaptability from the inputted balance;

a forward converter, arranged to perform a forward conversion of the color appearance model to convert color data of the input image into color data independent of any viewing condition by using the viewing condition of the image input side and the set parameter; and

an inverse converter, arranged to perform an inverse conversion of the color appearance model to convert the color data obtained in the forward conversion into color data dependent [[of]] on the viewing condition of the image output side by using the viewing condition of the image output side and the set parameter.

24. (currently amended) A computer program product stored in a computer readable medium comprising a computer program for an image processing method of performing color process on an input image based on a color apparatus model, said method comprising the steps of:

inputting a manual instruction of a user, which relates to a condition for respectively adjusting balance of a chromatic adaptability;

inputting a manual instruction of the user, which relates to viewing conditions of respectively an image input side and an image output side;

setting a parameter of the chromatic adaptability from the inputted balance;

performing a forward conversion of the color appearance model to convert color data of the input image into color data independent of any viewing condition by using the viewing condition of the image input side and the set parameter; and

performing an inverse conversion of the color appearance model to convert the color data obtained in the forward conversion into color data dependent [[of]] on the viewing condition of the image output side by using the viewing condition of the image output side and the set parameter.